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2021	Title 2010 Fall Wild Turkey Harvest Results	

Abstract: *Hunters harvested 751 wild turkeys during the sixth fall turkey hunting season. The 2010 fall harvest was 3% less than the record 773 birds taken during the 2009 fall turkey season. The 61 days of archery-only portions of the season accounted for 27% of the harvest with 73% during the 5-12 days of the combined shotgun and archery seasons. Shotgun hunters accounted for 60% of the harvest. Weekends accounted for 40% of the total harvest with 28% during the 1-2 weekends of the combined archery and shotgun portions. Juvenile birds made up 22% of the harvest with a juvenile to adult ratio of 1:3.6. The high adult proportion (78%) was probably related to a combination below average brood production in 2010, hunter selection for larger adult birds, and age determination errors. Counties harvesting at least 30 birds ($\geq 4\%$ of harvest total) were Jefferson, Harrison, Pike, Warrick, Crawford, and Switzerland. The proportion of the fall to spring harvest by county ranged from 0% to 12% and the statewide fall to spring harvest proportion was 6% due to the conservative season structure and relatively low hunter interest. Factors related to the severe summer-fall drought and below normal brood production likely influenced the fall 2010 turkey harvest.*

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The 6th modern day fall wild turkey hunting season in Indiana was held with a statewide early and late archery portions (October 1-31, 2010 and December 4 – January 2, 2011; 61 days) and one combined shotgun and archery portion of regionally different length (5 days from October 20-24 in 7 northern Indiana counties; 12 days from October 20-31 in 43 west-central and southern Indiana counties). Hunters harvested a total of 751 birds during the entire fall season with 200 (27%) taken during the archery-only portions and 551 (73%) taken during the combined shotgun and archery portions (Table 1). Overall, shotgun hunters accounted for 60% of the harvest. The 2010 fall harvest was 3% less than the 773 birds taken in the 2009 (the highest fall harvest since implementation in 2005). Weekends accounted for 40% of the harvest with 12% during the archery-only weekends and 28% during the 1-2 weekends of combined shotgun and archery portions (Table 2).

Comprehensive lifetime license holders harvested 53% of the birds followed by resident fall turkey license holders (30%) with 13% of the harvest by exempt landowners and active military on leave (Table 3). The number of resident fall turkey licenses increased by 537 permits (+26%). The proportion of the harvest by youths (7%) was similar to 2008 and 2009. The number of license-exempt landowners and active military personnel participating in the fall hunting seasons is unknown.

The determination of the sex and age of harvested wild turkeys was done by hunters and check station operators using a combination of spur and fall plumage characteristics (wing and breast feathers) as depicted in illustrations provided in the Indiana Hunting and Trapping Guide. Juvenile birds made up 22% of the harvest while adults composed 78% for a juvenile to adult ratio of 1:3.6 (Table 4). Adult hens composed the largest proportion (49%) of the harvest, followed by adult gobblers (30%). Based on observations in other states, a high proportion of adults in the fall harvest, especially adult hens, generally follow a summer of

poor brood production. Brood production in Indiana during the 2010 summer was below average as it has been each summer since 2005. In contrast, fall harvest research in other states generally report that adult males are the least vulnerable to fall harvest compared to the other sex/age cohorts. Hunter selection for larger birds, when given the opportunity, likely contributed to the high proportion of adult males in Indiana's fall harvests. Finally, the interpretation of the fall sex and age criteria by hunters and check station operators is an undetermined error factor. Accurate sex and age determinations of fall turkeys are a common problem, even in states with more fall turkey hunting experience.

Counties harvesting at least 30 birds ($\geq 4\%$ of the total harvest) were Jefferson, Harrison, Pike, Warrick, Crawford, and Switzerland (Table 5; Figure 1). Twenty-four counties open to archery only hunting did not harvest a single bird. The proportion of the fall to spring harvest by county ranged from 0% to 12% and the statewide fall to spring harvest proportion was 6% due to the conservative season structure and relatively low hunter interest. Despite the substantial increases in hunter opportunity in 2010 (increased hunter days and expanded hunting range), the fall harvest dropped 3%. The severe extended drought and abnormally high temperatures that extended to nearly Thanksgiving, an early row-crop harvest with high amounts of shattered grain left in fields, high levels of mast in some areas, and another summer of low turkey production likely influenced the fall harvest in 2010.

Table 1. Fall wild turkey harvest by season and equipment used - Indiana, 2010.

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Hunting Equipment ^a	Portion of the fall wild turkey sason						Equipment totals		Days of opportunity
	Early archery ^b		Combined shotgun & archery ^c		Late archery ^d				
	No.	%	No.	%	No.	%	No.	%	
Bow	183	60.0%	104	34.0%	17	6.0%	304	40%	61
Shotgun	---	---	447	81.1%	---	---	447	60%	12S/5N ^c
Season Totals ^e	183	24.4%	551	73.4%	17	2.0%	751		

^a Bow includes crossbow (<1 % of archery harvest); shotgun includes muzzleloading shotguns (< 1% of firearm harvest).

^b Early archery portion of fall turkey season. Dates 1-31 October 2010 (31 days)

^c Combined shotgun and archery portion. Dates: south 20-31 October (12 days shotgun); northern 7 counties 20-24 October 2010 (5 days shotgun).

^d Late archery portion 4 December 2010 - 2 January 2011 (30 days).

^e Represents proportion of total harvest (751) taken during the early archery, combined shotgun and archery, and late archery portions of the fall

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Table 2. Fall wild turkey harvest by weekday period during the 2010 season, Indiana.

Weekday Period	No. Harvested	Percent of Total
<u>Early Archery Only</u> ^a		
Weekdays	99	13.2%
Weekends	84	11.2%
Season Subtotal	183	24.4%
<u>Combined Archery and Shotgun</u> ^b		
Weekdays	340	45.3%
Weekends	211	28.1%
Season Subtotal	551	73.4%
<u>Late Archery</u> ^c		
Weekdays	9	1.2%
Weekends	8	1.1%
Season Subtotal	17	2.3%
Season Total	751	100.0%

^a Early archery portion of fall turkey season. Dates 1-31 October 2010 (31 days)

^b Combined shotgun and archery portion. Dates: south 20-31 October (12 days shotgun); northern 7 counties 20-24 October 2010 (5 days shotgun).

^c Late archery portion 4 December 2010 - 2 January 2011 (30 days).

Table 3. Fall wild turkey harvest by permit type - Indiana, 2010.

Type of Permit	Harvest by Permit	% of Harvest	No. Licenses Sold by Season End Date ^a	Differences in Licenses Sold from Prior Year (%)
Resident Fall Turkey	220	29.5%	2,591	+537 (+26%)
Non-Resident Fall Turkey	1	0.1%	13	-4 (-24%)
Comprehensive Lifetime	381	53.2%	43,028 ^b	----- ^b
Comprehensive Youth	49	6.6%	39,100	+12,547 (+47%)
Landowner/active military	94	12.6%	Unknown & Exempt	Unknown & Exempt
Total by permit ^c	745			

^a Apprentices licenses (new 2008) included in respective license type totals.

^b Comprehensive lifetime hunt and hunt & fish licenses as of July 2005 when the lifetime licenses discontinued. Value represents the number of lifetime license holders who could potentially hunt.

^c Missing values for permit type = 6; actual total harvest = 751.

Table 4. Age and sex structure of the fall wild turkey harvest - Indiana, 2010.

	Juvenile ^a		Adult ^b		Total ^c	
	No.	% ^c	No.	% ^c	No.	% ^c
Male	81	11.0%	218	29.6%	299	40.6%
Female	80	10.9%	358	48.6%	438	59.4%
Total ^c	161	21.8%	576	78.2%	737	
					Juvenile : Adult	
					1 : 3.6	

^a Juvenile were birds estimated to be < 6 months old.

^b Adults were birds estimated to be ≥ 14 months old.

^c Percents are based on 737 birds; sex/age not recorded for 14 birds of 751 total harvest.

Table 5. Fall and spring wild turkey harvests in Indiana, 2010. ^a

County	Type of Fall Season ^b	2010 Fall Harvest	Percent of Fall Harvest	2010 Spring Harvest	Percent of Fall / Spring
Adams	Archery †	0	0	10	---
Allen	Both †	0	0	21	---
Bartholomew	Both ‡	4	0.5%	123	3.3%
Benton	Archery	0	0.0%	10	---
Blackford	Archery †	0	0	8	---
Boone	Archery †	0	0	6	---
Brown	Both	3	0.4%	169	1.8%
Carroll	Archery	0	0.0%	18	---
Cass	Archery	1	0.1%	49	2.0%
Clark	Both	18	2.4%	347	5.2%
Clay	Both	2	0.3%	107	1.9%
Clinton	Archery †	0	0	1	---
Crawford	Both	30	4.0%	328	9.1%
Daviess	Both ‡	4	0.5%	130	3.1%
Dearborn	Both	27	3.6%	426	6.3%
Decatur	Archery	2	0.3%	82	2.4%
DeKalb	Both ‡	6	0.8%	170	3.5%
Delaware	Archery †	0	0	0	---
Dubois	Both	22	2.9%	237	9.3%
Elkhart	Archery	5	0.7%	96	5.2%
Fayette	Both ‡	4	0.5%	68	5.9%
Floyd	Both	12	1.6%	113	10.6%
Fountain	Both	8	1.1%	127	6.3%
Franklin	Both	19	2.5%	366	5.2%
Fulton	Archery	5	0.7%	157	3.2%
Gibson	Both ‡	7	0.9%	154	4.5%
Grant	Archery	0	0.0%	5	---
Greene	Both	13	1.7%	310	4.2%
Hamilton	Archery †	0	0	1	---
Hancock	Archery †	0	0	2	---
Harrison	Both	35	4.7%	607	5.8%
Hendricks	Archery †	0	0	16	---
Henry	Archery †	0	0	2	---
Howard	Archery	0	0.0%	11	---
Huntington	Archery	0	0.0%	49	---
Jackson	Both	23	3.1%	291	7.9%
Jasper	Archery	3	0.4%	119	2.5%
Jay	Archery †	0	0	11	---
Jefferson	Both	42	5.6%	451	9.3%
Jennings	Both	15	2.0%	310	4.8%
Johnson	Archery	4	0.5%	33	12.1%
Knox	Both ‡	3	0.4%	89	3.4%
Kosciusko	Archery	5	0.7%	108	4.6%
Lagrange	Both ‡	9	1.2%	154	5.8%
Lake	Archery	0	0.0%	13	---
LaPorte	Both ‡	15	2.0%	259	5.8%
Lawrence	Both	11	1.5%	287	3.8%

Table 5 con't on next page.

Table 5. Fall and spring wild turkey harvests in Indiana, 2010. ^a (continued)

County	Type of Fall Season ^b	2010 Fall Harvest	Percent of Fall Harvest	2010 Spring Harvest	Percent of Fall / Spring
Madison	Archery †	0	0	0	---
Marion	Archery †	0	0	0	---
Marshall	Both ‡	19	2.5%	363	5.2%
Martin	Both	12	1.6%	225	5.3%
Miami	Archery	3	0.4%	40	7.5%
Monroe	Both	10	1.3%	205	4.9%
Montgomery	Archery	3	0.4%	69	4.3%
Morgan	Both ‡	5	0.7%	73	6.8%
Newton	Archery	2	0.3%	128	1.6%
Noble	Archery	4	0.5%	84	4.8%
Ohio	Both	12	1.6%	180	6.7%
Orange	Both	13	1.7%	287	4.5%
Owen	Both	13	1.7%	224	5.8%
Parke	Both	9	1.2%	280	3.2%
Perry	Both	11	1.5%	355	3.1%
Pike	Both	33	4.4%	302	10.9%
Porter	Archery	1	0.1%	34	2.9%
Posey	Both ‡	8	1.1%	170	4.7%
Pulaski	Archery	7	0.9%	148	4.7%
Putnam	Both	8	1.1%	158	5.1%
Randolph	Archery †	0	0	1	---
Ripley	Both	19	2.5%	269	7.1%
Rush	Archery †	0	0	4	---
St. Joseph	Both ‡	15	2.0%	227	6.6%
Scott	Both	11	1.5%	209	5.3%
Shelby	Archery †	0	0	7	---
Spencer	Both	21	2.8%	298	7.0%
Starke	Both ‡	17	2.3%	318	5.3%
Steuben	Both ‡	11	1.5%	363	3.0%
Sullivan	Both	10	1.3%	273	3.7%
Switzerland	Both	30	4.0%	508	5.9%
Tippecanoe	Archery	1	0.1%	50	2.0%
Tipton	Archery †	0	0	0	---
Union	Both	3	0.4%	90	3.3%
Vanderburg	Both ‡	4	0.5%	45	8.9%
Vermillion	Both	5	0.7%	127	3.9%
Vigo	Both	5	0.7%	153	3.3%
Wabash	Archery	4	0.5%	78	5.1%
Warren	Both ‡	5	0.7%	143	3.5%
Warrick	Both	32	4.3%	368	8.7%
Washington	Both	21	2.8%	310	6.8%
Wayne	Archery	2	0.3%	34	5.9%
Wells	Archery †	0	0	9	---
White	Archery	3	0.4%	61	4.9%
Whitley	Archery †	2	0.003	21	9.5%
Totals		751	100.0%	13,742	5.5%

^a Harvest totals from check station reports.^b Archery = archery only. Both = archery and shotguns.

† New county open to archery only fall turkey hunting in 2010.

‡ New county open to shotgun hunting in 2010, previously open to archery only fall turkey hunting.

Figure 1. 2010 Fall Turkey Harvest

